

## Clinical Image

### Dead Space Volume in N95 Masks

### Espacio muerto en una máscara N95

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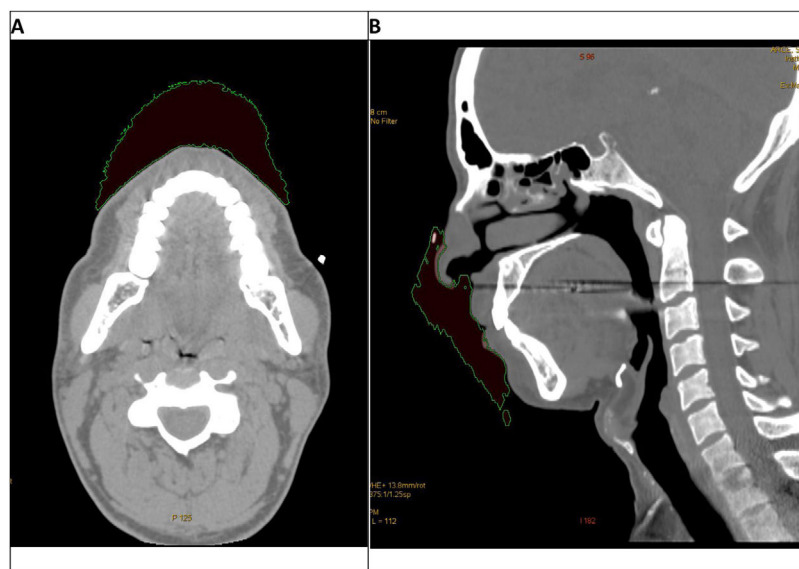


Fig. 1.

A health-worker's CT scan showing the air space between the mask (3 M Aura 1870+) and the face skin (138 mL). This volume remains relatively constant throughout the respiratory cycle, since its shape and material confers certain rigidity (fig. 1). Dead space of the respiratory airways is increased by about 50–80%, compensated with a raise in pulmonary ventilation to keep alveolar ventilation and CO<sub>2</sub> stable<sup>1</sup>. This could have an impact in severely impaired respiratory patients.

### Supports/contributions

None.

### Reference

1. Hinds WC, Bellin P. The effect of respirator dead space and lung retention on exposure estimates. *Am Ind Hyg Assoc J.* 1993;54:711–22.

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